



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

H'A

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,015	02/05/2004	David Bertrand	P10-1378 US	5336
5514	7590	06/26/2006	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			SUN, XIUQIN	
			ART UNIT	PAPER NUMBER
			2863	

DATE MAILED: 06/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/773,015	BERTRAND, DAVID
	Examiner Xiuqin Sun	Art Unit 2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

1) Responsive to communication(s) filed on 09 June 2006.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

4) Claim(s) 1-16 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-16 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 05 February 2006 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6) <input type="checkbox"/> Other: _____

**DETAILED ACTION**

***Response to Amendment***

1. Upon further consideration, the finality of the last Office Action mailed on 03/09/2006 has been withdrawn and replaced by the following Office Action. Any inconvenience to the Applicant(s) is regretted.

***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Independent claims 1-3 and 15 are directed towards an algorithm for determining characteristics of a tire. However, there is no useful, concrete and tangible result either specifically recited in the claim or flow inherently therefrom. The practical application of the claimed invention cannot be realized until the information determined is conveyed to the user. For the result to be tangible it would need to output to a user or displayed to a user or stored for later use. Hence the claims are treated as nonstatutory functional descriptive material (See MPEP Sec. 2106). To view the new guidelines for 35 U.S.C. 101 please view the following OG notice:

<http://www.uspto.gov/web/offices/com/sol/og/2005/week47/patgupa.htm>

***Allowable Subject Matter***

4. Claims 1-16 are allowed if rewritten to overcome the rejection under 35 U.S.C. 101 set forth in this Office action.

***Reasons for Allowance***

The following is a statement of reasons for the indication of allowable subject matter:

The primary reason for the allowance of claims 1 and 4-14 is the inclusion of the claimed step of obtaining at least two measurements of circumferential extension or contraction between at least a pair of two measurements of circumferential extension or contraction between at least a pair of fixed points positioned at a same radius and being separated in azimuth in at least one sidewall of the tire, the at least two measurements being made at two predetermined azimuth positions of the tire that are separated in azimuth from the center of the contact area. It is this limitation found in each of the claims, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

The primary reason for the allowance of claim 2 is the inclusion of the claimed step of obtaining at least two measurements of circumferential extension or contraction between at least a pair of two measurements of circumferential extension or contraction between at least a pair of fixed points positioned at a same radius and being separated in azimuth in at least one sidewall of the tire, the at least two measurements being made at two predetermined azimuth positions of the tire that are separated in azimuth

from the center of the contact area, wherein the circumferential contraction or extension of both of the sidewalls is estimated by measuring the distance between the cords of the carcass ply in the sidewalls. It is this limitation found in the claim, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this claim allowable over the prior art.

The primary reason for the allowance of claim 3 is the inclusion of the claimed step of obtaining at least two measurements of circumferential extension or contraction between at least a pair of two measurements of circumferential extension or contraction between at least a pair of fixed points positioned at a same radius and being separated in azimuth in at least one sidewall of the tire, the at least two measurements being made at two predetermined azimuth positions of the tire that are separated in azimuth from the center of the contact area, wherein the circumferential contraction or extension of both of the sidewalls is estimated by measuring the distance between wires forming a sensor which measures a variation in capacitance linked with the distance separating two electrodes. It is this limitation found in the claim, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this claim allowable over the prior art.

The primary reason for the allowance of claims 15 and 16 is the inclusion of the claimed method steps of: determining measurement azimuths and collecting values of circumferential extension of at least one sidewall during varied stresses on the tire which stresses are selected to span a full range in which evaluation of the at least one selected characteristic will be permitted in normal use, the selected stresses giving rise

to all the couplings liable to be encountered during normal use; obtaining values of circumferential extension with a first measurement means and values of the at least one selected characteristic associated with circumferential extension with a second measurement means in order to form a training base. It is these limitations found in each of the claims, as they are claimed in the combination that have not been found, taught or suggested by the prior art of record, which make these claims allowable over the prior art.

***Response to Arguments***

6. Applicant's arguments received 06/09/2006 with respect to independent claims 1-3 have been considered and they are persuasive. Allowable subject matters recited in these claims are identified.

***Contact Information***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiuqin Sun whose telephone number is (571)272-2280. The examiner can normally be reached on 6:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571)272-2269. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Xiuqin Sun  
Examiner  
Art Unit 2863

XS  
June 20, 2006

BRYAN BUI  
PRIMARY EXAMINER

